

We claim:

1. A method for controlling coniferous plants, wherein an effective amount of at least one herbicide B selected from the group consisting of sulfentrazone, carfentrazone, their agriculturally acceptable salts and their agriculturally acceptable derivatives is applied to coniferous plants to be controlled and/or to the parts of these plants.
2. The method as claimed in claim 1, wherein at least one further herbicide A which is selected from the group consisting of
 - A1 acetolactate synthase inhibitors (ALS inhibitors);
 - A2 photosynthesis inhibitors;
 - A3 enolpyruvyl shikimate 3-phosphate synthase inhibitors (EPSP inhibitors);
 - A4 glutamine synthetase inhibitors;
 - A5 auxin herbicides; and
 - A6 fosamine.
3. The method as claimed in claim 2, wherein the further herbicide A is selected from:
 - A1 from the group of the ALS inhibitors: amidosulfuron, azimsulfuron, bensulfuron, chlorimuron, chlorsulfuron, cinosulfuron, cyclosulfamuron, ethametsulfuron, ethoxysulfuron, flazasulfuron, flupyrsulfuron, foramsulfuron, halosulfuron, imazosulfuron, iodosulfuron, mesosulfuron, metsulfuron, nicosulfuron, oxasulfuron, primisulfuron, prosulfuron, pyrazosulfuron, rimsulfuron, sulfometuron, sulfosulfuron, thifensulfuron, triasulfuron, tribenuron, trifloxysulfuron, triflusulfuron, tritosulfuron, imidazolinone herbicides, cloransulam, diclosulam, florasulam, flumetsulam, metosulam, penoxsulam, bispyribac, pyriminobac, propoxycarbazone, flucarbazone, pyribenzoxim, pyriftalid and pyriithiobac;
 - A2 from the group of the photosynthesis inhibitors: atraton, atrazine, ametryne, aziprotryne, cyanazine, cyanatryn, chlorazine, cyprazine, desmetryne, dimethametryne, dipropetryn, eglinazine, ipazine, mesoprazine, methometon, methoprotetryne, procyazine, proglinazine, prometon, prometryne, propazine, sebuthylazine, secbumeton, simazine, simeton, simetryne, terbumeton, terbuthylazine, terbutryne, trietazine, ametrudione, amibuzin, hexazinone, isomethiozin, metamitron, metribuzin, bromacil, isocil, lenacil, terbacil, brompyrazon, chloridazon, dimidazon, desmedipham, phenisopham, phenmedipham, phenmedipham-ethyl, benzthiazuron, buthiuron, ethidimuron, isouron, methabenzthiazuron, monoisouron, tebuthiuron, thiazafluron, anisuron, buturon, chlorbromuron, chloreturon, chlorotoluron, chloroxuron, difenoxuron, dimefuron, diuron,

fenuron, fluometuron, fluothuron, isoproturon, linuron, methiuron, metobenzuron, metobromuron, metoxuron, monolinuron, monuron, neburon, parafluron, phenobenzuron, siduron, tetrafluron, thidiazuron, cyperquat, diethamquat, difenzoquat, diquat, morfamquat, paraquat, bromobonil, bromoxynil, chloroxynil, iodobonil, ioxynil, amicarbazone, bromofenoxim, flumezin, methazole, bentazon, propanil, pentanochlor, pyridate, and pyridafol;

A3 from the group of the EPSP synthase inhibitors: glyphosate;

A4 from the group of the glutamine synthase inhibitors: glufosinate and bilanaphos;

A5 from the group of the auxin herbicides: clomeprop, 2,4-D, 2,4,5-T, MCPA, MCPA thioethyl, dichlorprop, dichlorprop-P, mecoprop, mecoprop-P, 2,4-DB, MCPB, chloramben, dicamba, 2,3,6-TBA, tricamba, quinclorac, quinmerac, aminopyralid, clopyralid, fluroxypyr, picloram, triclopyr and benazolin; and

A6 fosamine

their agriculturally acceptable salts and their agriculturally acceptable derivatives.

4. The method as claimed in claim 3, wherein

a) at least one herbicide A, which is selected from imidazolinone herbicides, and

b) at least one further herbicide B, which is selected from the group consisting of sulfentrazone, carfentrazone, their agriculturally acceptable salts and their agriculturally acceptable derivatives,

is applied to the coniferous plants to be controlled or to their parts, such as roots, leaves, seeds or germinants.

5. The method as claimed in claim 4, wherein herbicide A is selected from imazapyr, its agriculturally acceptable salts and its agriculturally acceptable derivatives.

6. The method as claimed in claim 4 or 5, wherein herbicide B is selected from carfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.

7. The method as claimed in claim 1, wherein herbicide A is selected from the group consisting of metsulfuron and sulfometuron, their agriculturally acceptable salts and their agriculturally acceptable derivatives.

20

8. The method as claimed in claim 1, wherein herbicide A is selected from the group consisting of atrazine, cyanazine, hexazone, diuron, bromoxynil and paraquat, their agriculturally acceptable salts and their agriculturally acceptable derivatives.
- 5 9. The method as claimed in claim 1, wherein herbicide A is glyphosate an agriculturally acceptable salt or an agriculturally acceptable derivative thereof.
10. The method as claimed in claim 1, wherein herbicide A is glufosinate an agriculturally acceptable salt or an agriculturally acceptable derivative thereof.
- 10 11. The method as claimed in claim 1, wherein herbicide A is selected from the group consisting of 2,4-D, dicamba, aminopyralid, clopyralid, fluroxypyr, picloram and triclopyr, their agriculturally acceptable salts and their agriculturally acceptable derivatives.
- 15 12. The method as claimed in claim 1, wherein herbicide A is fosamine an agriculturally acceptable salt or an agriculturally acceptable derivative thereof.
- 20 13. The method as claimed in claim 1, wherein herbicide A is selected from the group consisting of metsulfuron, sulfometuron, imazapyr, hexazone, paraquat, glyphosate, glufosinate, 2,4-D, dicamba, aminopyralid, clopyralid, picloram, triclopyr and fosamine, their agriculturally acceptable salts and their agriculturally acceptable derivatives.
- 25 14. The method as claimed in claim 1, wherein the effective amount of herbicide B and optionally herbicide A is applied during site preparation for a plantation of coniferous trees.
- 30 15. The method as claimed in claim 2, wherein the herbicide A and the herbicide B are applied in a weight ratio A:B ranging from 1:5 to 200:1.
16. The method as claimed in claim 2, wherein the herbicide A is applied in amounts from 100 to 1400 g/ha.
- 35 17. The method as claimed in claim 1, wherein the herbicide B is applied in amounts from 10 to 500 g/ha.
- 40 18. The method as claimed in claim 1, wherein the effective amount of herbicide B and optionally herbicide A is applied after emergence of the coniferous plants to be controlled.

21

19. The method as claimed in claim 1, wherein the coniferous plants to be controlled belong to the pinaceae family.

20. The method as claimed in claim 19, wherein the coniferous plants to be controlled are selected from the pine species *P. banksiana*, *P. clausa*, *P. echinata*, *P. elliotti*, *P. contorta*, *P. palustris*, *P. glabra*, *P. lambertina*, *P. ponderosa*, *P. pungens*, *P. rigida*, *P. resinosa*, *P. serotina*, *P. strobus*, *P. taeda* and *P. virginiana*.

21. A herbicidal composition, which comprises at least one herbicide A, which is selected from the group consisting of

A1 acetolactate synthase inhibitors (ALS inhibitors);

A2 photosynthesis inhibitors;

A3 enolpyruvyl shikimate 3-phosphate synthase inhibitors (EPSP inhibitors);

A4 glutamine synthetase inhibitors;

A5 auxin herbicides; and

A6 fosamine, and

at least one further herbicide B, which is selected from the group consisting of sulfentrazone, carfentrazone, their agriculturally acceptable salts and their agriculturally acceptable derivatives,

except for compositions which comprise at least one herbicide A selected from chlorimuron, halosulfuron, metsulfuron, nicosulfuron, primisulfuron, prosulfuron, thifensulfuron, tribenuron, imazamethabenz, flumetsulam, pyriothiac, atrazine, difenzoquat, paraquat, bromoxynil, pyridate, glyphosate, glufosinate, 2,4-D, MCPA, dicamba, clopyralid, fluoxazine, the agriculturally acceptable salts thereof and the agriculturally acceptable derivatives thereof, and carfentrazone, an agriculturally acceptable salt thereof or an agriculturally acceptable derivative thereof, and

except for compositions which comprise at least one herbicide A selected from chlorimuron, rimsulfuron, tribenuron, imazethapyr, cloransulam, flumetsulam, metribuzin, glyphosate, 2,4-D, the agriculturally acceptable salts thereof and the agriculturally acceptable derivatives thereof, and sulfentrazone, an agriculturally acceptable salt thereof or an agriculturally acceptable derivative thereof.

22. The composition as claimed in claim 21, wherein herbicide A is selected from imazapyr, its agriculturally acceptable salts and its agriculturally acceptable derivatives.

22

23. The composition as claimed in claim 21 or 22, wherein herbicide B is selected from carfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.
- 5 24. The composition as claimed in claim 21, wherein herbicide A is selected from the group consisting of metsulfuron and sulfometuron, their agriculturally acceptable salts and their agriculturally acceptable derivatives and wherein herbicide B is selected from sulfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives. .
- 10 25. The composition as claimed in claim 21, wherein herbicide A is selected from the group consisting of cyanazine, hexazone and diuron, their agriculturally acceptable salts and their agriculturally acceptable derivatives, and wherein herbicide B is selected from carfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.
- 15 26. The composition as claimed in claim 21, wherein herbicide A is selected from the group consisting of atrazine, cyanazine, hexazone, diuron, bromoxynil and paraquat, their agriculturally acceptable salts and their agriculturally acceptable derivatives, and wherein herbicide B is selected from sulfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.
- 20 27. The composition as claimed in claim 21, wherein herbicide A is glufosinate an agriculturally acceptable salt or an agriculturally acceptable derivative thereof, and wherein herbicide B is selected from sulfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.
- 25 28. The composition as claimed in claim 21, wherein herbicide A is selected from the group consisting of dicamba, aminopyralid, clopyralid, fluroxypyr, picloram and triclopyr, their agriculturally acceptable salts and their agriculturally acceptable derivatives, and wherein herbicide B is selected from sulfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.
- 30 29. The composition as claimed in claim 21, wherein herbicide A is selected from the group consisting of aminopyralid, picloram and triclopyr, their agriculturally acceptable salts and their agriculturally acceptable derivatives, and wherein herbicide B is selected from carfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.
- 35 30. The composition as claimed in claim 21, wherein herbicide A is fosamine.
- 40

23

31. The composition as claimed in claim 21, wherein herbicide A is selected from the group consisting of metsulfuron, sulfometuron, imazapyr, hexazone, paraquat, glufosinate, dicamba, aminopyralid, clopyralid, picloram, triclopyr and fosamine their agriculturally acceptable salts and their agriculturally acceptable derivatives,
5 and wherein herbicide B is selected from sulfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.

32. The composition as claimed in claim 21, wherein herbicide A is selected from the group consisting of sulfometuron, imazapyr, hexazone, aminopyralid, picloram, triclopyr and fosamine their agriculturally acceptable salts and their agriculturally
10 acceptable derivatives, and wherein herbicide B is selected from carfentrazone, its agriculturally acceptable salts and its agriculturally acceptable derivatives.

15